Winnebago Landfill Company, LLC

5450 Wansford Way, Suite 201 • Rockford, IL 61109 • Tel: (815) 963-7516 • Fax: (815) 381-5647

201801AAF

Title V

August 23, 2007

Ms. Julie Armitage
Division of Air Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794

RE: Winnebago Landfill
CAAPP Application No. 99020102, I.D. No. 201801AAF
2007 Semi-Annual NSPS Report (January 1, 2007 through June 30, 2007)

Dear Ms. Armitage:

Winnebago Reclamation Service respectfully submits the enclosed report to meet compliance with 40 CFR Part 60, Subpart WWW, New Source Performance Standards for municipal solid waste landfills and 40 CFR 63 Subparts A and AAAA, National Emission Standard for Hazardous Air Pollutants for municipal solid waste landfills.

Enclosed is the Landfill Gas Collection and Control System Semi-Annual Report covering the period from January 1, 2007 through June 30, 2007. If you have any questions, please do not hesitate to contact me at 815-963-7533-5649.

Sincerely,

Winnebago Reclamation Service

Evan Buskohl
Environmental Manager

Enclosure Semi-Annual NSPS Report (January 1, 2007 through June 30, 2007)

cc: Bridgette Chapman – Cornerstone Environmental Group, LLC
Khaled Mahmood – Cornerstone Environmental Group, LLC
Peoria Regional Office – IEPA-DAPC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE
Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

COMPLIANCE AND GENERAL REPORTING FORM	*FOR AGENCY USE ONLY*
	ID NUMBER:
	PERMIT #:
	DATE:

THIS FORM IS USED FOR EITHER OF THE FOLLOWING:

- TO REPORT AND CERTIFY COMPLIANCE OF AN ENTIRE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS DURING A REPORTING PERIOD, OR
- TO IDENTIFY AND ENSURE PROPER PROCESSING OF A SUBMITTED REPORT. THIS FORM SHOULD BE USED AS THE COVER SHEET OF THE SUBMITTED REPORT.

SOURCE INFORMATION

1) SOURCE NAME: **Winnebago Landfill**

2) DATE FORM PREPARED:	3) SOURCE ID NO. (IF KNOWN):
August 27, 2007	**201801AAF**

GENERAL INFORMATION

4) INDICATE FOR WHICH OF THE FOLLOWING THIS FORM IS BEING COMPLETED:

☐ TO REPORT AND CERTIFY COMPLIANCE OF THE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS

☒ TO IDENTIFY AND ENSURE PROPER PROCESSING OF A SUBMITTED REPORT

5) PERIOD COVERED BY THIS REPORT:

FROM: 01 / 01 /2007 TO: 06 / 30 / 2007

6) NAME AND PHONE NUMBER OF PERSON TO CONTACT FOR QUESTIONS REGARDING THIS REPORT:

NAME: Evan Buskohl TITLE: Environmental Manager

PHONE#: (815) 963-7533 EXT: _____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

FOR APPLICANT'S USE
_____

APPLICATION PAGE 1

COMPLIANCE OF SOURCE OR EQUIPMENT DURING REPORTING PERIOD

- COMPLETE ITEM 7 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF THE ENTIRE SOURCE.
- COMPLETE ITEM 8 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF SPECIFIC ITEMS OF EQUIPMENT ONLY.

7) WAS THE SOURCE IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD? ☐ Yes ☐ No

IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.

IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 -"EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."

8a) LIST THE EMISSION UNIT(S) AND CONTROL EQUIPMENT FOR WHICH THIS FORM IS BEING COMPLETED TO REPORT AND CERTIFY COMPLIANCE WITH (IF ADDITIONAL SPACE IS NEEDED FOR ITEM 10, ATTACH AND LABEL AS EXHIBIT 400-A):

b) IDENTIFY THE APPLICABLE REQIREMENT(S) FOR WHICH THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE WITH:

c) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRE THAT THIS REPORT OR CERTIFICATION BE SUBMITTED:

d) WERE THE ABOVE REFERENCED ITEMS IN 8(a) IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD? ☐ Yes ☐ No

IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.

IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 - "EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."

REPORT INFORMATION

9) TITLE OF REPORT BEING SUBMITTED:

Semi-Annual NSPS Compliance Report

10) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRES THIS REPORT (IF APPLICABLE):

Permit Condition 7.1.3 and 7.1.10 of CAAPP Permit No. 99020102.
Permit Condition 5.2.5 of CAAPP Permit No. 99020102.

11) BRIEFLY EXPLAIN WHAT THIS REPORT COVERS:

Semi-annual NSPS compliance monitoring and reporting requirements for the GCCS at the facility as required by 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA.

12) ATTACH THE REPORT TO THIS FORM.

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

13) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 

AUTHORIZED SIGNATURE

Vice President
TITLE OF SIGNATORY

Thomas Hilbert
TYPED OR PRINTED NAME OF SIGNATORY

August 27, 2007
DATE

LANDFILL GAS COLLECTION AND CONTROL SYSTEM SEMI-ANNUAL REPORT

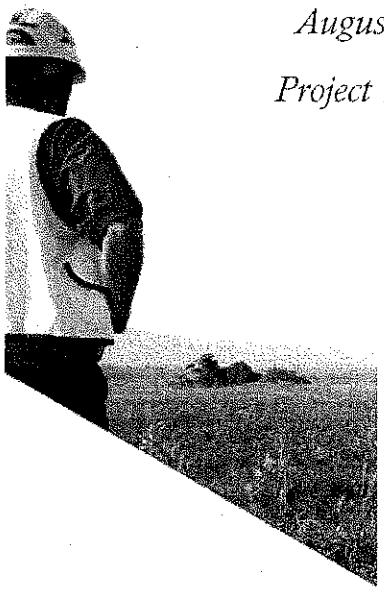
WINNEBAGO LANDFILL

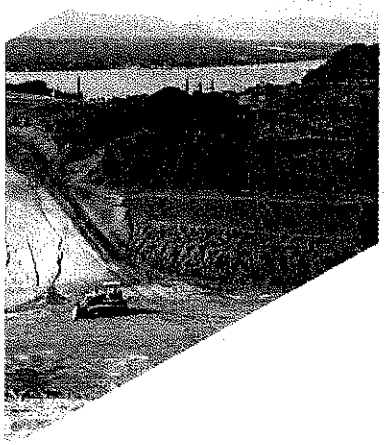
PREPARED FOR:

Winnebago Reclamation Service

August 2007

Project 70104.1





CORNERSTONE
Environmental Group, LLC

39395 W. Twelve Mile Rd. • Suite 103 • Farmington Hills, MI 48331

"Think Cornerstone for building and maintaining your solid waste business on a strong foundation."

LANDFILL GAS COLLECTION AND CONTROL SYSTEM SEMI-ANNUAL REPORT

WINNEBAGO LANDFILL

Prepared for

Winnebago Reclamation Service

January 1, 2007 – June 30, 2007

Prepared by

CORNERSTONE
Environmental Group, LLC
39395 W 12 Mile Road, Suite 103
Farmington Hills, MI 48331

Project # 70104.1

CONTENTS

1 INTRODUCTION AND CERTIFICATION

1.1 Purpose

This document serves as a landfill gas collection and control system (GCCS) semi-annual report for the Winnebago Landfill pursuant to:

- 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW, New Source Performance Standards (NSPS) for municipal solid waste landfills, and
- 40 CFR 63 Subparts A and AAAA, National Emission Standard for Hazardous Air Pollutants for municipal solid waste landfills.

The purpose of this document is to provide performance documentation in accordance with the NSPS requirements for the installed and active portions of the GCCS at the Winnebago Landfill.

1.2 Record Keeping and Reporting

Records will be prepared and maintained in accordance with 40 CFR §60.758 and §63.1980. The primary location for record storage is at the Winnebago Reclamation Service offices located in Rockford, Illinois.

1.3 Certification

This GCCS semi-annual report for the Winnebago Landfill has been prepared by Cornerstone Environmental Group, LLC (Cornerstone) as authorized by Winnebago Reclamation Service. This GCCS semi-annual report was prepared based on Cornerstone's review of information provided by the Winnebago Landfill to Cornerstone pertaining to the GCCS operations.

Bridgette Chapman

Bridgette Chapman, P.E.
Project Engineer

Khaled Mahmood

Khaled Mahmood, P.E.
Project Manager

2 EXISTING SITE CONDITIONS

2.1 Landfill Description

Winnebago Landfill, owned and operated by Winnebago Reclamation Service, is located in Rockford, Illinois and accepts municipal and other wastes under operating permit number 1991-138-LF issued by the Illinois Environmental Protection Agency (IEPA).

The Winnebago Landfill contains several separate fill areas as follows:

- The area filled to final grade, known as the north unit, is approximately 42.7 acres with an active GCCS.
- The active waste filling area, known as the south unit, is approximately 27.5 acres. An active GCCS is installed in portions of the south unit.

2.2 Landfill Gas Collection and Control System

A GCCS has been installed and currently operates in the areas filled to final grade or in active areas where the waste is five or more years old. The existing GCCS consists of approximately 37 vertical extraction wells in the north unit and 10 vertical extraction wells in the south unit. These extraction wells convey the landfill gas (LFG) from the refuse, through a series of lateral and header pipes, to a flare station for destruction. Two flare stations, one for the north unit collection system and one for the south unit collection system, are located at the facility.

3 SEMI-ANNUAL REPORT REQUIREMENTS

In accordance with §60.757(f) and §63.1980(a), a semi-annual report is required to be submitted from applicable facilities containing performance and monitoring data for the operation of the GCCS.

The requirements under the semi-annual report are as follows:

1. Value and length of time for exceedance of parameters monitored under §60.756(a), (b), (c), and (d) which include:

   - Monthly recording of gauge pressure at all wellheads, all wells must operate under negative pressure conditions.
   - Monthly monitoring of oxygen or nitrogen concentrations at all wellheads, oxygen must not equal or exceed 5% or nitrogen must not equal or exceed 20%.
   - Monthly monitoring of temperatures at all wellheads, temperature shall not equal or exceed 55°C (131°F).
   - For open flares all periods where landfill gas flow is not recorded at least once every 15 minutes and presence of flame is not continuously indicated.
   - For enclosed combustors with a heat input capacity less than 44 megawatts, all periods where landfill gas flow is not recorded at least once every 15 minutes and temperature is not recorded continuously. Also, all three hour periods during which the average combustion temperature was more than 28°C below the average temperature recorded during the performance test for the control device.
   - Report all 3-hour averaging block of numerical continuous parameter (i.e., combustion temperature) monitoring data containing at least one hour of invalid data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. Data collected during any of the events described in 40 CFR 63.1975 (monitoring system breakdowns, repairs, calibration checks; control device startup, shutdowns, and malfunctions) are not to be included in any 3-hour averaging block (40 CFR 63.1955 – 40 CFR 63.1975).

2. Description and duration of all periods when the gas stream was diverted from the control device through a bypass line.

3. Description and duration of all periods when the control device was not operating for greater than one hour and the length of time that the device was not operating.

4. All periods greater than 5 days when the collection system was not operating.

5. The location and concentration of all surface emission exceedances (> 500ppm above background).

6. The date of installation and location of all wells or system expansions as the result of monitoring exceedances.

4 SEMI-ANNUAL REPORT

The information included in this section and applicable appendices, satisfies the requirements under §60.757(f) for the semi-annual report. The reporting period covered in this report is from January 1, 2007 through June 30, 2007.

4.1 Wellfield Monitoring

Monitoring data for the GCCS has been collected, at a minimum, on a monthly frequency for inclusion in the Winnebago Landfill's semi-annual report. Site personnel at Winnebago Landfill were responsible for collecting data. Wellhead monitoring data (pressure, temperature, and oxygen concentration) was recorded using a LANDTEC GEM-500. A complete copy of the results for the monthly monitoring is included in Appendix A.

In accordance with the NSPS regulations, monthly monitoring, corrective measures, and compliant readings within 15-days were conducted at the north and south landfill units except for the instances described below.

Gas extraction well GW 102 was removed from service in February 2006. This gas well was a poor producing LFG well with an average methane concentration of less than 30%. Other gas extraction wells in the area provide sufficient coverage as indicated by surface emission monitoring results in the area. During the current reporting period, monthly inspections of the wellfield showed that GW 102 occasionally had methane levels above 50%. As such, GW 102 was returned to service in February 2007.

Three gas wells (GWS02, GWS04, and GWS06) in the South Unit were damaged during filling activities at these wells in June 2007. They will be replaced this fall when filling in the area has ceased.

The monthly monitoring includes monitoring for vacuum (pressure), oxygen, and temperature. When operating parameters indicated an exceedance, necessary corrective actions were initiated within 5 days; however, compliant readings were not always conducted within 15 days. Field staff have been retrained on the requirement to obtain compliant readings prior to 15-days of initial non-compliant reading.

Additionally, several gas extraction wells (101, 102, 103, and 120) operated with oxygen above 5% or with positive pressure intermittently throughout the reporting period. It was

suspected that the positive pressure and elevated oxygen concentration may have been caused by a plugged sump near the gas wells that is used for leachate removal. This plugged sump caused condensate in a header line to accumulate to levels that began to affect the oxygen and pressure at several gas collection wells. It took several months to identify that the sump was the problem and that it was affecting the gas wells in the area. Based on the location of the plugged sump, the filling activities that were taking place, and the weather conditions, it was difficult to diagnose the problem and access to the sump was restricted for several months. In May, a temporary leachate/condensate bypass relief line was installed. On July 27, 2007, the sump lines were cleaned and jetted to completely return the system back to normal. All gas wells were operating in compliance during the July 2007 monitoring event.

Monthly wellfield monitoring, corrective actions and any records of remonitoring were recorded and kept on file.

4.2 LFG Bypass Operations

During the period encompassed under this report, LFG was not diverted through a bypass line. There is no bypass line installed on the GCCS. Therefore, when downtime occurred for either flare, the associated GCCS was shutdown.

4.3 Control Device Operation

The primary control devices for the Winnebago Landfill are two open flares. The north unit flare controls landfill gas collected from the north unit of the Winnebago Landfill. The south unit flare controls landfill gas collected from the south unit of the Winnebago Landfill. An enclosed flare is available as a back-up control for the north unit.

The operating records for the north unit flare, south unit flare, and enclosed flare were reviewed for the reporting period. There were several instances where the north unit flare or the south unit flare were down for more than 1 hour. Operating records for the flares are maintained at the site. A summary of downtime events greater than 1 hour is included in Appendix B.

The enclosed flare is used as a backup device and did not operate during the reporting period covered in this report. Therefore, there was no landfill gas flow or combustion temperature to be monitored or recorded.

During this reporting period there was one (1) instance in which a 3-hour averaging block of numerical continuous parameter monitoring data that contained at least one hour of invalid data as described in §40 CFR 63.1965 and §40 CFR 63.1975. Records are not available for the south unit flare on one occasion. During a 10 hour period on January 4, 2007 from 2 PM to midnight, data was corrupted and is not available. It appears that the cause of the corrupted data may have been a power surge or anomaly.

4.4 Collection System Operation

During the period encompassed under this report, the gas collection system was never shutdown for more than five days on any one occasion.

4.5 Surface Emissions Monitoring

Quarterly surface emission monitoring was performed by Andrews Environmental Engineering, Inc. using a flame ionization detector/photo ionization detector (FID/PID) as required under §60.755(c)(3). Testing was conducted around the perimeter of the collection area and in a serpentine pattern across the collection area as depicted in the surface emissions monitoring plan included in the previously submitted GCCS design plan.

Surface emissions monitoring for the first and second quarter of 2007 were conducted on March 19, 2007 and June 26, 2007 respectively. No exceedances of the 500 ppm background concentration were detected at Winnebago Landfill during either monitoring event.

Results of surface emissions monitoring events are maintained at the Winnebago Reclamation Service offices and are included in Appendix C.

4.6 Collection System Expansion

During the reporting period, no expansion of the collection system occurred due to wellfield exceedances or NSPS requirements.

5 LIMITATIONS

The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Cornerstone shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

APPENDIX A

WELLFIELD MONITORING DATA

Winnebago Landfill Gas Extraction 1/3/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	1/3/2007 15:12	45.9	30.5	2.1	21.49	1.1	823	1,063	
WinGW100	1/3/2007 10:36	37.3	24.8	1.8	36.1	-6.8	60	0	Increased 1/4
WinGW101	1/3/2007 10:38	32.1	25.3	1.7	40.9	-2.7	54	0	Increased 1/4
WinGW102	1/3/2007 10:41					-2.4	86	0	Decommissioned
WinGW103	1/3/2007 10:44	29.6	26.9	2.1	41.4	-8.9	102	0	Decreased 1/4
WinGW110	1/3/2007 10:33	44.7	28.5	1.6	25.2	-4	60	0	Increased 1/4
WinGW111	1/3/2007 11:12	44	32.9	1.7	21.39	-5.9	112	0	Increased 1/4
WinGW112	1/3/2007 11:09	49.1	32.3	4.1	14.5	-1.2	77	0	Increased 1/4
WinGW113	1/3/2007 10:47	44	30.1	0.5	25.4	-7	72	0	Increased 1/4
WinGW120	1/3/2007 10:31	43	28	1.9	27.1	-7.4	53	0	Decreased 1/4
WinGW121	1/3/2007 11:15	44.9	32.9	0.5	21.69	-14.2	86	0	Increased 1/4
WinGW122	1/3/2007 11:30	32.6	27.8	2.6	37	-27.7	89	0	Decreased 1/4
WinGW123	1/3/2007 10:50	39.2	29.6	1.2	29.99	-12	91	0	
WinGW130	1/3/2007 10:27	46.4	25.8	2.2	25.59	-9.4	60	0	Decreased 1/4
WinGW131	1/3/2007 11:17	56.7	38.3	0	5	-8.2	83	0	Increased 1/4
WinGW132	1/3/2007 13:12	56.5	43.4	0	0.09	-5.6	77	0	Increased 1/4
WinGW133	1/3/2007 13:15	52	32	3.6	12.4	-0.3	62	0	Increased 1/4
WinGW134	1/3/2007 15:36	52	28.1	3.5	16.4	-36.8	62	0	Decreased 1/4
WinGW140	1/3/2007 13:31	51.3	27.1	3.4	18.2	-0.1	67	0	Increased 1/4
WinGW141	1/3/2007 13:27	51.5	32.6	4.3	11.6	-2.5	94	0	Decreased 1/4
WinGW142	1/3/2007 15:22	58.9	39.9	0.2	0.99	-11.2	69	0	Increased 1/4
WinGW150	1/3/2007 10:17	58.1	36.2	0	5.7	-20.6	64	0	Decreased 1/4
WinGW151	1/3/2007 11:36	56.8	40.1	1.2	1.9	-2.6	105	0	Increased 1/4
WinGW152	1/3/2007 12:45	53.1	38.9	0	8	-17.1	54	0	Increased 1/4
WinGW160	1/3/2007 10:15	54.8	34.2	2.2	8.8	-9.8	67	0	
WinGW161	1/3/2007 11:39	46.9	33.2	1.1	18.79	-6.9	90	0	Increased 1/4
WinGW162	1/3/2007 12:22	54	38.1	0.9	7	-24	83	0	Increased 1/4
WinGW170	1/3/2007 10:12	56.4	33.8	0	9.79	-30.1	91	0	Decreased 1/4
WinGW171	1/3/2007 12:37	57.1	38.3	1.1	3.5	-17.4	50	0	Decreased 1/4
WinGW180	1/3/2007 10:09	49.4	32.7	0	17.89	-12.9	76	0	Increased 1/4
WinGW181	1/3/2007 12:39	43.3	32.8	0	23.9	-12	97	0	Increased 1/4
WinGW190	1/3/2007 10:07	44.9	27.7	0	27.39	-7	80	0	Increased 1/4
WinGW191	1/3/2007 10:03	59.2	39.7	0.2	0.89	-11.6	87	0	Increased 1/4
WINGWEEH	1/3/2007 12:32	39.5	28.5	4.4	27.6	-41.3	95	0	Decreased 1/4
WINGWEMH	1/3/2007 12:19	56.5	40.2	0.2	3.09	-6.9	78	0	Increased 1/4
WINGWEWH	1/3/2007 12:44	36.3	28.4	2.8	32.5	-0.9	46	0	Increased 1/4

Gas Extraction South Unit 1/3/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	1/3/2007 14:58	58.3	40.7	0.6	0.39	3.6	476	769	
WINGWS01	1/3/2007 15:05	32.1	24.1	3.7	40.1	-0.8	97	0	Increased 1/4
WINGWS02	1/3/2007 14:48	58.5	39.7	0	1.79	-17.7	109	0	Increased 1/4
WINGWS03	1/3/2007 14:17	55.7	38.8	0	5.5	-3.2	117	0	Increased 1/4
WINGWS04	1/3/2007 14:22	56	38.2	0	5.79	-25.2	112	0	Increased 1/4
WINGWS05	1/3/2007 14:25	57.6	42.3	0	0.1	-24.6	94	0	Increased 1/4
WINGWS06	1/3/2007 14:20	56.9	43	0	0.09	-3.6	100	0	Increased 1/4
WINGWS08	1/3/2007 14:13	55.1	38	0	6.9	-12.2	110	0	Increased 1/4
WINGWS10	1/3/2007 14:28	57.9	42	0	0.09	-25.4	79	0	Increased 1/4
WINGWS11	1/3/2007 14:10	58.2	41.7	0	0.09	-1.6	87	0	Increased 1/4
WINGWS17	1/3/2007 14:07	57.6	40.9	0.4	1.1	-3.9	103	0	Increased 1/4
WINNGS14	1/3/2007 14:30	56.5	43.4	0	0.09	-7.5	102	0	Increased 1/4
WINNGS20	1/3/2007 14:32	58.7	41.2	0	0.09	-9.3	101	0	Increased 1/4
WINNGS24	1/3/2007 14:35	53.1	36.7	0	10.2	-10.4	113	0	Increased 1/4
WINNGS30	1/3/2007 14:39	57.4	39.4	0	3.19	-3.7	95	0	Increased 1/4

Winnebago Landfill Gas Extraction 2/26/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	2/26/2007 15:06	27.1	18.3	9.7	44.9	1.6	1,202	1,212	
WinGW100	2/26/2007 12:38	20.4	19.1	4.6	55.9	-16.9	52	0	Decreased 1/4
WinGW101	2/26/2007 12:42	38.2	27.9	1.7	32.2	-4.8	57	0	Increased 1/4
WinGW102	2/26/2007 12:48	8.3	7.6	15.5	68.6	-2.7	69	0	
WinGW102	3/15/2007 13:18	50.2	29.1	3.1	17.59	0	84	0	
WinGW103	2/26/2007 12:52	45.4	32.9	0.7	20.99	-4.6	76	0	Increased 1/4
WinGW110	2/26/2007 12:22	39.9	25.4	4.2	30.49	-6.3	57	0	Increased 1/4
WinGW111	2/26/2007 13:22	43.6	33.4	0.7	22.3	-5.2	105	0	Increased 1/4
WinGW112	2/26/2007 13:19	56.9	39.7	0.3	3.09	-0.3	50	0	Increased 1/4
WinGW113	2/26/2007 12:57	34.5	28.2	0	37.3	-5.8	70	0	Increased 1/4
WinGW120	2/26/2007 15:01	33.5	19.4	4.9	42.19	-1.1	32	0	
WinGW121	2/26/2007 13:25	47.7	33.2	0.3	18.79	-9.2	80	0	Increased 1/4
WinGW122	2/26/2007 13:16	39.5	30.6	2.2	27.7	-14.4	85	0	
WinGW123	2/26/2007 13:02	51.2	32.5	0	16.29	-7.5	92	0	Increased 1/4
WinGW130	2/26/2007 12:11	51.1	27.3	1	20.6	-5.6	56	0	
WinGW131	2/26/2007 13:40	57.9	38.5	0.1	3.49	-5.8	72	0	Increased 1/4
WinGW132	2/26/2007 14:53	50.2	34.8	4.2	10.8	-0.2	48	0	
WinGW133	2/26/2007 13:13	47.8	31	4.6	16.6	-8.3	83	0	
WinGW134	2/26/2007 13:05	55.2	32.1	1.6	11.1	-7.1	50	0	Increased 1/4
WinGW140	2/26/2007 12:06	49.4	28.7	4.6	17.29	-7.5	57	0	Decreased 1/4
WinGW141	2/26/2007 14:05	55.7	44.2	0	0.09	-6.3	101	0	Increased 1/4
WinGW142	2/26/2007 14:19	58.9	41	0	0.09	-12	51	0	Increased 1/4
WinGW150	2/26/2007 11:59	55.5	32.5	1.9	10.1	-7.9	57	0	Increased 1/4
WinGW151	2/26/2007 14:44	57.8	41.7	0.2	0.3	-0.1	102	0	Increased 1/4
WinGW152	2/27/2007 11:49	56.6	40.7	2.6	0.1	-14	40	0	
WinGW160	2/26/2007 11:55	57.2	36.3	0.9	5.6	-4.9	59	0	Increased 1/4
WinGW161	2/26/2007 14:41	57.7	41.6	0.5	0.2	-0.1	86	0	Increased 1/4
WinGW162	2/26/2007 14:25	56.6	40.8	2.5	0.1	-16.5	37	0	
WinGW170	2/26/2007 11:53	49.5	29.9	2.8	17.8	-15.4	84	0	Decreased 1/4
WinGW171	2/26/2007 14:27	53.5	37.5	1.1	7.9	-3	65	0	Increased 1/4
WinGW180	2/26/2007 11:49	44.2	27.5	3	25.3	-7	72	0	Increased 1/4
WinGW181	2/27/2007 11:37	51.5	33.6	0.4	14.5	-6.4	95	0	
WinGW190	2/26/2007 11:46	62.9	27.8	0.4	8.89	-0.1	42	0	
WinGW191	2/26/2007 14:34	51.2	33.4	0.3	15.09	-6.1	94	0	Increased 1/4
WINGWEEH	2/26/2007 14:30	57.6	38.6	0	3.8	-16.8	65	0	Increased 1/4
WINGWEMH	2/26/2007 14:23	57.8	41.2	0.8	0.19	-0.6	70	0	Increased 1/4
WINGWEWH	2/26/2007 14:15	56.3	43.6	0	0.1	-1.8	38	0	Increased 1/4

Gas Extraction South Unit 2/26/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	2/26/2007 17:14	54.9	40	0.3	4.79	6.3	494	928	
WINGWS01	2/26/2007 16:29	29	27	2.8	41.2	-2.7	93	0	
WINGWS02	2/26/2007 16:37	51.6	37.6	0	10.8	-35.4	107	0	
WINGWS03	2/26/2007 16:32	50.1	38.7	0	11.2	-6.4	114	0	
WINGWS04	2/26/2007 16:42	50.6	38.7	0	10.7	-49	110	0	Decreased 1/4
WINGWS05	2/26/2007 16:46	55.2	40.7	0.3	3.79	-47.8	94	0	
WINGWS06	2/26/2007 16:34	51.5	37.8	0	10.7	-12.5	91	0	
WINGWS08	2/26/2007 16:24	49.7	38.1	0.2	12	-13.6	106	0	
WINGWS10	2/26/2007 16:50	53.5	40.1	0	6.4	-49.1	77	0	Decreased 1/4
WINGWS11	2/26/2007 16:17	55	38.2	1.2	5.59	-7	86	0	Increased 1/4
WINGWS17	2/26/2007 16:14	53.7	39.1	0.4	6.8	-8.5	103	0	Increased 1/4
WINNGS14	2/26/2007 16:52	56.2	42.2	0	1.59	-16.4	103	0	Increased 1/4
WINNGS20	2/26/2007 16:56	55.1	40.1	0.2	4.6	-20.8	104	0	Increased 1/4
WINNGS24	2/26/2007 16:58	48.8	36.1	0	15.1	-20.6	112	0	Increased 1/4
WINNGS30	2/26/2007 17:01	55	39.7	0	5.29	-6.8	89	0	Increased 1/4

Winnebago Landfill Gas Extraction 3/27/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	3/27/2007 13:21	49.8	32.3	1.6	16.3	1.5	953	1,088	
WinGW100	3/27/2007 12:02	38.6	23.2	2.1	36.1	-4.3	90	0	Increased 1/4
WinGW101	3/30/2007 9:21	5.6	4.5	17.3	72.6	-3.4	46	0	Decreased 1/2
WinGW102	3/27/2007 12:09	37.7	21.7	7.4	33.19	-0.8	98	0	
WinGW103	3/27/2007 12:12	45.2	31.6	0.2	22.99	-4.6	105	0	Increased 1/4
WinGW110	3/27/2007 11:57	57.9	27.3	2.4	12.4	-8.3	93	0	Increased 1/4
WinGW111	3/27/2007 10:55	48.3	34.2	0.5	17	-5.3	113	0	Increased 1/4
WinGW112	3/27/2007 13:33	58.6	40.4	0.8	0.19	-1.1	103	0	
WinGW113	3/27/2007 12:15	26	23.9	3.2	46.9	-7.8	90	0	Increased 1/4
WinGW120	3/27/2007 11:52	47.3	25	3.3	24.4	-7.3	87	0	Increased 1/4
WinGW121	3/27/2007 10:53	46.2	32.3	1.7	19.79	-11.9	89	0	Increased 1/4
WinGW122	3/27/2007 11:00	46	30.8	2.3	20.9	-19	101	0	
WinGW123	3/27/2007 12:18	52.3	34	0.1	13.6	-9.4	95	0	
WinGW130	3/27/2007 11:49	51.5	27.1	1.7	19.69	-9.9	70	0	Increased 1/4
WinGW131	3/27/2007 10:50	57.1	38.8	0	4.1	-9.7	97	0	
WinGW132	3/27/2007 10:47	56	43.7	0.1	0.19	-0.5	95	0	Increased 1/4
WinGW133	3/27/2007 10:38	58.6	41.3	0	0.1	-0.2	98	0	Increased 1/4
WinGW134	3/30/2007 16:37	52.3	26.6	4.8	16.29	-10.4	61	0	
WinGW140	3/27/2007 11:46	61.5	37.4	0	1.09	-0.7	100	0	Increased 1/4
WinGW141	3/27/2007 10:41	44.5	28.5	4.4	22.6	-16.3	96	0	Decreased 1/4
WinGW142	3/27/2007 10:33	56.1	38.5	0	5.4	-20.4	93	0	
WinGW150	3/27/2007 11:43	59.3	35.8	0.3	4.6	-23.8	64	0	
WinGW151	3/27/2007 10:30	51.7	36.6	1.2	10.5	-3.9	106	0	Increased 1/4
WinGW152	3/27/2007 10:26	54	37.4	0	8.59	-28.5	90	0	
WinGW160	3/27/2007 11:41	59.6	38	0	2.4	-10.4	89	0	
WinGW161	3/27/2007 10:23	56.9	42.9	0	0.19	-1.2	102	0	Increased 1/4
WinGW162	3/27/2007 10:22	52	36.2	1.9	9.89	-20.7	87	0	Increased 1/4
WinGW170	3/27/2007 11:38	51.1	28.9	3	17	-23	97	0	Decreased 1/4
WinGW171	3/27/2007 10:17	53.2	37.1	1	8.7	-7.2	74	0	Increased 1/4
WinGW180	3/27/2007 11:29	51.8	32.8	0.1	15.3	-11.3	80	0	
WinGW181	3/27/2007 10:10	47.7	34.3	0.3	17.7	-10.7	100	0	
WinGW190	3/27/2007 11:26	52.5	30.5	0.3	16.7	-7.9	90	0	
WinGW191	3/27/2007 10:12	59.4	38.8	0	1.79	-25.6	100	0	
WINGWEEH	3/27/2007 10:15	57.8	39	0	3.2	-29.2	94	0	
WINGWEMH	3/27/2007 10:20	59.1	40.4	0	0.5	-9.8	83	0	
WINGWEWH	3/27/2007 10:28	46.7	31.9	0.2	21.2	-12.4	99	0	

Gas Extraction South Unit 3/27/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	3/27/2007 13:53	57.4	40.3	0.5	1.79	6.9	410	920	
WINGWS01	3/27/2007 12:42	42.3	31.3	1.2	25.2	-2.6	119	0	Increased 1/4
WINGWS02	3/27/2007 12:50	57.3	39.7	0.5	2.5	-30.5	111	0	Decreased 1/4
WINGWS03	3/27/2007 12:45	54.1	37.7	0	8.2	-6.1	122	0	Increased 1/4
WINGWS04	3/27/2007 12:52	53.6	37.4	0.3	8.7	-39.3	116	0	Decreased 1/4
WINGWS05	3/27/2007 12:55	58.3	41.6	0	0.1	-38.8	102	0	Decreased 1/4
WINGWS06	3/27/2007 12:47	51.8	36.7	1.3	10.2	-12	115	0	Increased 1/4
WINGWS08	3/27/2007 12:39	52.4	37.3	0.1	10.19	-12.2	110	0	
WINGWS10	3/27/2007 12:57	58.4	40.8	0	0.79	-39.6	92	0	Decreased 1/4
WINGWS11	3/27/2007 12:33	56.6	43.2	0	0.2	-6.7	92	0	
WINGWS17	3/27/2007 12:30	55.5	40	1	3.5	-7.7	113	0	Increased 1/4
WINNGS14	3/27/2007 12:59	57.1	42.8	0	0.1	-14	108	0	
WINNGS20	3/27/2007 13:02	57.9	42	0	0.09	-16.1	108	0	
WINNGS24	3/27/2007 13:04	53.7	37.4	0	8.89	-19.2	119	0	
WINNGS30	3/27/2007 13:07	58	40.2	0	1.79	-7.5	104	0	

Winnebago Landfill Gas Extraction 4/23/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	4/23/2007 12:46	45.6	31.1	2	21.3	1.1	940	932	
WinGW100	4/23/2007 11:07	49.3	25.4	0.8	24.5	-1.5	65	0	Increased 1/4
WinGW101	4/23/2007 11:13	51.6	23.1	5.2	20.1	-0.6	62	0	Closed
WinGW102	4/23/2007 11:16	48.8	28.7	3.7	18.79	-1.1	70	0	
WinGW103	4/24/2007 14:04	7.4	5.3	17.7	69.59	-4.6	78	0	Decreased 1/4
WinGW110	4/23/2007 11:04	60.5	28.5	1.2	9.8	-1.6	63	0	Increased 1/4
WinGW111	4/23/2007 11:50	54.7	38.1	0.6	6.6	-3	108	0	Increased 1/4
WinGW112	4/23/2007 11:45	56.7	43.2	0	0.09	-2.3	91	0	Increased 1/4
WinGW113	4/23/2007 11:24	32.8	25.9	1.5	39.79	-9.9	84	0	Increased 1/4
WinGW120	4/23/2007 11:00	52.1	28	2.9	17	-2.3	63	0	Increased 1/4
WinGW121	4/23/2007 11:53	45	32.7	0.9	21.4	-11.6	86	0	
WinGW122	4/23/2007 11:43	38.3	29.5	2.5	29.7	-24.8	97	0	Decreased 1/4
WinGW123	4/23/2007 11:27	55.6	34.8	0	9.6	-10.9	92	0	
WinGW130	4/23/2007 10:47	49.9	28.4	0.8	20.9	-18.1	68	0	
WinGW131	4/23/2007 11:55	56.5	39	0	4.5	-14.3	86	0	
WinGW132	4/23/2007 11:40	51.2	37.9	2.2	8.69	-1.1	82	0	Increased 1/4
WinGW133	4/23/2007 14:21	51.1	32.1	3.7	13.1	-0.9	75	0	Increased 1/4
WinGW134	4/23/2007 11:29	58	29.8	2.4	9.8	-9.9	70	0	Increased 1/4
WinGW140	4/23/2007 10:44	40	26.3	4.3	29.4	-17.2	76	0	Decreased 1/4
WinGW141	4/23/2007 14:24	48.8	34.2	3.6	13.4	-4.5	74	0	Increased 1/4
WinGW142	4/23/2007 12:02	55.6	36	1	7.4	-29.8	92	0	Decreased 1/4
WinGW150	4/23/2007 10:40	55	35.2	0.1	9.69	-31.1	60	0	Decreased 1/4
WinGW151	4/23/2007 12:23	45.9	33.7	2.2	18.19	-12.9	100	0	Increased 1/4
WinGW152	4/23/2007 12:04	46.3	34.5	0.6	18.6	-35.4	95	0	Decreased 1/4
WinGW160	4/23/2007 10:36	55.1	35.3	0.1	9.5	-15.5	75	0	
WinGW161	4/23/2007 12:20	56.8	42.7	0.4	0.09	-9.1	74	0	Increased 1/4
WinGW162	4/23/2007 12:09	45.6	31.6	3.3	19.5	-30	90	0	Decreased 1/4
WinGW170	4/23/2007 10:34	55.3	34.2	0	10.5	-30.5	91	0	Decreased 1/4
WinGW171	4/23/2007 12:12	46.8	33.5	2.4	17.3	-15.3	99	0	Increased 1/4
WinGW180	4/23/2007 10:30	41.3	30.5	0	28.2	-18.5	79	0	
WinGW181	4/23/2007 12:16	44.3	33.6	0	22.1	-19.1	97	0	
WinGW190	4/23/2007 10:27	37.5	26.6	0.1	35.8	-14.4	93	0	
WinGW191	4/23/2007 10:23	57.4	39.2	0.4	2.99	-35.2	97	0	Decreased 1/4
WINGWEEH	4/23/2007 12:14	43.3	30.7	3.7	22.3	-36.6	90	0	Decreased 1/4
WINGWEMH	4/23/2007 12:08	56.4	40	0.3	3.29	-16.2	83	0	
WINGWEWH	4/23/2007 12:06	25.1	25.2	3	46.7	-18.6	112	0	Increased 1/4

Gas Extraction South Unit 4/23/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	4/23/2007 13:59	53.2	37.9	0.3	8.59	6.4	638	878	
WINGWS01	4/24/2007 13:53	49.4	31	0.3	19.29	-0.3	79	0	Increased 1/4
WINGWS02	4/23/2007 13:27	57	40	0.2	2.8	-38.4	104	0	Decreased 1/4
WINGWS03	4/23/2007 13:16	42.8	34.1	0	23.1	-7.2	122	0	Decreased 1/4
WINGWS04	4/23/2007 13:32	50.9	36.1	0.6	12.4	-43.8	110	0	Decreased 1/4
WINGWS05	4/23/2007 13:35	57.7	42.2	0	0.09	-43.1	101	0	Decreased 1/4
WINGWS06	4/23/2007 13:29	44.1	34.3	0.9	20.7	-15.5	115	0	
WINGWS08	4/23/2007 13:11	39.3	31.4	1.3	28	-14.1	110	0	Increased 1/4
WINGWS10	4/23/2007 13:37	55.9	40.7	0	3.39	-43.6	88	0	Decreased 1/4
WINGWS11	4/23/2007 13:01	58.2	40.7	0	1.09	-7.6	92	0	Increased 1/4
WINGWS17	4/23/2007 12:58	48.5	35.6	1.6	14.3	-8.9	117	0	Increased 1/4
WINNGS14	4/23/2007 13:40	57.3	41.5	0	1.2	-16.8	107	0	
WINNGS20	4/23/2007 13:42	57.2	40.2	0	2.59	-21.3	109	0	Decreased 1/4
WINNGS24	4/23/2007 13:45	47.7	34.4	0.1	17.79	-22.6	120	0	Decreased 1/4
WINNGS30	4/23/2007 13:47	54.6	38.2	0	7.2	-8.8	95	0	Increased 1/4

Winnebago Landfill Gas Extraction 5/3/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	5/3/2007 12:16	44.1	30.8	1.8	23.3	1	956	777	
WinGW100	5/3/2007 11:13	47.3	25.2	0.6	26.9	-1.6	72	0	Increased 1/4
WinGW101	5/3/2007 11:19	34.8	19.3	7.4	38.49	-0.4	78	0	Needs Repair
WinGW102	5/3/2007 11:22	33.8	20.2	7.7	38.29	-0.8	92	0	Increased 1/4
WinGW103	5/3/2007 11:27	20.7	13.8	12.7	52.8	-4.6	78	0	Increased 1/4
WinGW110	5/3/2007 11:10	50.9	30	1.5	17.59	-1.7	77	0	Increased 1/4
WinGW111	5/3/2007 11:44	54.7	38.2	0.5	6.59	-2.3	106	0	Decreased 1/4
WinGW112	5/3/2007 11:42	56	43.9	0	0.09	-1.8	88	0	Increased 1/4
WinGW113	5/3/2007 11:30	29.8	25.6	1.7	42.9	-11	83	0	Increased 1/4
WinGW120	5/3/2007 11:05	0.7	0.9	19.3	79.1	0.1	70	0	Increased 1/4
WinGW121	5/3/2007 11:48	44.6	33.2	0.7	21.5	-10.3	84	0	Decreased 1/4
WinGW122	5/3/2007 11:40	36	29.4	2.3	32.3	-23	94	0	Decreased 1/4
WinGW123	5/3/2007 11:33	48.6	33.6	0	17.8	-13.3	92	0	
WinGW130	5/3/2007 10:55	48.1	28.2	0.5	23.2	-16	69	0	
WinGW131	5/3/2007 11:53	55.5	38.9	0	5.59	-12.8	87	0	
WinGW132	5/3/2007 11:57	56.5	43.1	0.3	0.1	-1.5	83	0	Increased 1/4
WinGW133	5/3/2007 10:04	48	30.9	4.5	16.6	-0.8	70	0	Increased 1/4
WinGW134	5/3/2007 11:36	51.8	30.4	2.8	15	-12.3	72	0	Increased 1/4
WinGW140	5/3/2007 10:53	41.7	26.7	4	27.59	-9.7	78	0	Decreased 1/4
WinGW141	5/3/2007 9:58	55.9	43.5	0.4	0.19	-1.8	77	0	Increased 1/4
WinGW142	5/3/2007 10:01	54	38.5	0	7.5	-26.7	91	0	Decreased 1/4
WinGW150	5/3/2007 10:50	54.8	33.6	0	11.6	-20.3	60	0	
WinGW151	5/3/2007 10:16	47.6	34.9	1.7	15.8	-9	101	0	Increased 1/4
WinGW152	5/3/2007 12:11	57.3	41.3	0.7	0.7	-33.7	70	0	Decreased 1/4
WinGW160	5/3/2007 10:47	54.5	34.2	0	11.29	-13.8	77	0	
WinGW161	5/3/2007 10:19	56.3	43.5	0.1	0.1	-6.6	78	0	
WinGW162	5/3/2007 10:22	46.9	32.1	4.8	16.2	-25.6	79	0	Decreased 1/4
WinGW170	5/3/2007 10:45	54.5	33.6	0	11.9	-28.9	92	0	Decreased 1/4
WinGW171	5/3/2007 10:26	46.3	33.5	2.4	17.8	-13.4	100	0	Increased 1/4
WinGW180	5/3/2007 10:42	40.7	29.2	0	30.09	-16.9	79	0	
WinGW181	5/3/2007 10:30	42.5	32.9	0	24.59	-17.4	87	0	
WinGW190	5/3/2007 10:41	34.1	26.3	0	39.6	-11.6	95	0	
WinGW191	5/3/2007 10:38	58.9	39.7	0.3	1.09	-35	76	0	Decreased 1/4
WINGWEEH	5/3/2007 10:28	46.5	33.1	2.6	17.8	-35.4	89	0	Decreased 1/4
WINGWEMH	5/3/2007 10:24	55.5	38.9	0.2	5.39	-15.6	82	0	
WINGWEWH	5/3/2007 10:13	32.7	28.3	2.3	36.7	-19	112	0	

Winnebago Gas Extraction South Unit 5/3/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	5/3/2007 13:11	54.7	38.8	0	6.5	5.7	737	857	
WINGWS01	5/3/2007 12:24	28.7	24	4.3	43	-2.6	119	0	Increased 1/4
WINGWS02	5/3/2007 13:07	57.6	40.6	0	1.8	-33.5	101	0	Decreased 1/4
WINGWS03	5/3/2007 12:26	45.1	34.4	0	20.5	-6.6	121	0	Increased 1/4
WINGWS04	5/3/2007 13:02	49	35.3	1.6	14.1	-14.4	105	0	Decreased 1/4
WINGWS05	5/3/2007 12:53	58.3	40.7	0.6	0.39	-37.8	100	0	Decreased 1/4
WINGWS06	5/3/2007 13:04	45.4	33.8	1	19.79	-14.3	115	0	Increased 1/4
WINGWS08	5/3/2007 12:30	43.3	33.2	0.7	22.8	-11.6	112	0	Increased 1/4
WINGWS10	5/3/2007 12:51	56.6	40.5	0	2.9	-38.1	85	0	Decreased 1/4
WINGWS11	5/3/2007 12:34	56.6	40.7	0	2.7	-7.8	92	0	Increased 1/4
WINGWS17	5/3/2007 12:36	49.1	36.1	1.4	13.4	-9.1	117	0	Increased 1/4
WINNGS14	5/3/2007 12:49	57.6	42.3	0	0.1	-15.1	107	0	
WINNGS20	5/3/2007 12:47	57.4	40.3	0	2.29	-19.1	109	0	
WINNGS24	5/3/2007 12:45	47.3	34.7	0	18	-20.4	119	0	
WINNGS30	5/3/2007 12:43	54.8	39.2	0	6	-8.3	95	0	Increased 1/4

Winnebago Landfill Gas Extraction 6/26/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP	Temp	Adj. Flow Scfm	Comments
WinGWFLA	6/26/2007 13:25	40.8	30.4	1.9	26.9	1.3	833	790	
WinGW100	6/26/2007 10:21	43.3	27.5	1.2	28	-3.6	94	0	Increased 1/4
WinGW101	6/26/2007 13:10	36.3	19.8	5.5	38.4	-0.4	82	0	
WinGW102	6/26/2007 10:34	29	20.7	4.8	45.5	-0.2	100	0	
WinGW103	6/26/2007 10:37	44.6	31.3	2.8	21.3	-2.5	92	0	Increased 1/4
WinGW110	6/26/2007 10:16	41.9	31.8	2	24.3	-2.2	100	0	Increased 1/4
WinGW111	6/26/2007 11:38	55.2	39.8	0.4	4.6	-1	104	0	Increased 1/4
WinGW112	6/26/2007 11:34	53.3	40.1	0.2	6.4	-0.2	108	0	Increased 1/4
WinGW113	6/26/2007 10:45	43.3	30.3	0.6	25.8	-5	93	0	Increased 1/4
WinGW120	6/26/2007 10:04	33.4	28.2	2.5	35.89	-31.7	90	0	Decreased 1/4
WinGW121	6/26/2007 11:44	40.5	34	0.8	24.7	-10.3	89	0	Increased 1/4
WinGW122	6/26/2007 11:27	27.8	25.1	4.8	42.3	-6.5	101	0	Decreased 1/4
WinGW123	6/26/2007 10:56	36.6	29.9	1.5	32	-18.1	91	0	
WinGW130	6/26/2007 9:58	70.2	19.1	1.3	9.4	-19.1	79	0	
WinGW131	6/26/2007 11:49	44.2	34.1	1.7	20	-14.7	90	0	Increased 1/4
WinGW132	6/26/2007 11:52	42.8	33.3	3.7	20.2	-1.5	102	0	Increased 1/4
WinGW133	6/26/2007 11:20	53.8	36.9	1.4	7.89	-0.1	83	0	Increased 1/4
WinGW134	6/26/2007 11:13	53.3	31.9	1.8	13	-13.6	79	0	Decreased 1/4
WinGW140	6/26/2007 9:53	77	18.9	3.9	0.2	-9.8	103	0	Increased 1/4
WinGW141	6/26/2007 11:57	56.5	41.9	0.3	1.29	-1.2	92	0	Increased 1/4
WinGW142	6/26/2007 12:03	48.5	33.2	2.2	16.09	-28.4	100	0	Decreased 1/4
WinGW150	6/26/2007 9:49	79.3	20.5	0.1	0.09	-32.6	65	0	Decreased 1/4
WinGW151	6/26/2007 12:56	42.6	33.4	1.3	22.7	-9	100	0	Increased 1/4
WinGW152	6/26/2007 12:10	54.9	41.5	0.1	3.49	-38.2	81	0	Decreased 1/4
WinGW160	6/26/2007 9:45	79	20.5	0.4	0.09	-15.4	103	0	Increased 1/4
WinGW161	6/26/2007 12:54	56.5	40.9	0.1	2.49	-4.2	90	0	Increased 1/4
WinGW162	6/26/2007 12:35	50.7	39	0.6	9.69	-34	81	0	Decreased 1/4
WinGW170	6/26/2007 9:39	75	22.9	0.2	1.9	-31.3	100	0	Decreased 1/4
WinGW171	6/26/2007 12:43	41.6	31.4	4.3	22.7	-14.8	101	0	Decreased 1/4
WinGW180	6/26/2007 9:34	51.6	19.9	0.1	28.4	-18.7	90	0	
WinGW181	6/26/2007 12:50	37.2	32	0.2	30.59	-17.9	100	0	Increased 1/4
WinGW190	6/26/2007 9:31	43.4	20.4	0.7	35.49	-11.9	100	0	Increased 1/4
WinGW191	6/26/2007 13:06	51.2	32.2	3.2	13.39	-25.5	100	0	Decreased 1/4
WINGWEEH	6/26/2007 12:45	43.4	32.6	1.8	22.2	-41.2	102	0	Decreased 1/4
WINGWEMH	6/26/2007 12:17	52.5	38.7	0.2	8.59	-18.3	90	0	Increased 1/4
WINGWEWH	6/26/2007 12:12	29.8	27.2	2.3	40.69	-17.2	113	0	Decreased 1/4

Winnebago Gas Extraction South Unit 6/29/07

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Comments
WINGWSFL	6/29/2007 9:57	46	36.7	0.6	16.69	4.2	848	749	
WINGWS01	6/29/2007 9:06	40.2	32.4	1.9	25.49	-1.9	121	0	Increased 1/4
WINGWS02		Destroyed during garbage placement. End of June							
WINGWS03	6/29/2007 9:03	49.3	37.7	0	13	-7.1	123	0	Increased 1/4
WINGWS04		Destroyed during garbage placement. End of June							
WINGWS05	6/29/2007 9:21	59.2	40.7	0	0.09	-31	102	0	Decreased 1/4
WINGWS06		Destroyed during garbage placement. End of June							
WINGWS08	6/29/2007 8:49	39.2	32.9	0.8	27.09	-9.8	127	0	Increased 1/4
WINGWS10	6/29/2007 9:24	57	40.9	0	2.09	-31.1	92	0	
WINGWS11	6/29/2007 8:42	56.3	38.4	0	5.29	-7.7	96	0	Increased 1/4
WINGWS17	6/29/2007 8:39	40	32.8	1.9	25.3	-6.8	124	0	Decreased 1/4
WINNGS14	6/29/2007 9:30	53.7	39.8	0	6.5	-13.1	108	0	Increased 1/4
WINNGS20	6/29/2007 9:48	53.2	38.1	0.7	8	-15.7	109	0	Increased 1/4
WINNGS24	6/29/2007 9:40	40.2	33.6	0	26.2	-18.1	132	0	
WINNGS30	6/29/2007 9:42	43.1	34.2	0.1	22.6	-7.3	100	0	Increased 1/4

APPENDIX B

CONTROL DEVICE DOWNTIME

Control Device Downtime Log

Date	Event Description or Reason	Length of Event	Equipment Number
2/7/2007 - 2/12/2007	Condensate sump was full and caused flare to shutdown. Subzero temperatures caused leachate line to freeze and condensate sump could not be emptied. When weather improved, the condensate sump was manually pumped down the flare was restarted.	120 hours	South Flare
2/13/2007	Condensate sump was full and caused flare to shutdown. Condensate sump was manually pumped down and the flare was restarted.	5 hours	South Flare
2/17/2007	Condensate sump was being pumped down. Flare was restarted after maintenance activities.	2.5 hours	South Flare
2/19/2007 - 2/21/2007	New condensate pump was being installed. Flare was restarted after the pump was installed.	41.5 hours	South Flare
2/21/2007 - 2/23/2007	New condensate pump had incorrect settings. Condensate sump could not be pumped. Pump settings were corrected and the flare was restarted.		South Flare
3/2/2007	Routine maintenance.	2.5 hours	South Flare
3/16/2007	Maintenance activities were being performed on the gas collection system. Flare was restarted after maintenance was completed.	10 hours	South Flare
3/18/2007 - 3/19/2007	Blower belts broke and propane tank was emptied upon auto-restart attempts. New belts were installed and the flare was restarted.	17.5 hours	South Flare
3/26/2007 - 3/27/2007	Unknown causes shutdown the flare. Possible power outage. Performed system maintenance. Replaced propane tank. Repaired hoses to correct for oxygen leaks in system.	10.5 hours	South Flare
1/4/2007 – 1/5/2007	Power outage. Flare was restarted when power was returned.	17.5 hours	North Flare
2/22/2007 - 2/23/2007	Loss of nitrogen and propane in tanks causing flare to shutdown. Tanks were replaced and the flare was restarted.	1.5 hours	North Flare
3/2/2007	System maintenance. Dome tank was pumped.	2.25 hours	North Flare
3/20/2007	System maintenance. Dome tank was pumped.	4.5 hours	North Flare
322/2007	Unknown causes shutdown the flare. Possible power outage. Flare was restarted.	12.5 hours	North Flare
3/25/2007 - 3/26/2007	System maintenance. Replaced nitrogen tank.	9 hours	North Flare

Control Device Downtime Log

Date	Event Description or Reason	Length of Event	Equipment Number
3/26/2007 – 3/27/2007	Unknown causes shutdown the flare. Possible power outage. Performed system maintenance. Replaced propane tank. Repaired hoses to correct for oxygen leaks in system.	11 hours	North Flare
4/25/2007	System maintenance.	2 hours	North Flare

APPENDIX C

SURFACE EMISSIONS MONITROING DATA

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 3/19/07 Site: Page 1 LF Project No.: 1990-114 SRF

Quarter (circle): (1st) 2nd 3rd 4th 2007 Technician: Savo Radulovic

Monitoring Event (circle): (initial) 1st 10-day re-monitor 2nd 10-day re-monitor

1-month re-monitor 1-month+10 day re-monitor

Instrument: Foxboro TVA-1000

Instrument Calibration:

Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 3/19/07 Time of calibration: _____ am pm

Calibration location (circle): office (field)

If calibrated in field, specify field location: 2,000,450N, 800,750E N. of Leachate Tank

Instrument set to read 500 ppm methane? (Y) N If no, explain: _____

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 60 °F Wind direction/speed: WNW 15-20 mph Weather: Clear

Barometric Pressure—Beginning: 29.96 in. Hg @ 1:54 am (pm)

Ending: 30.01 in. Hg @ 4:54 am (pm)

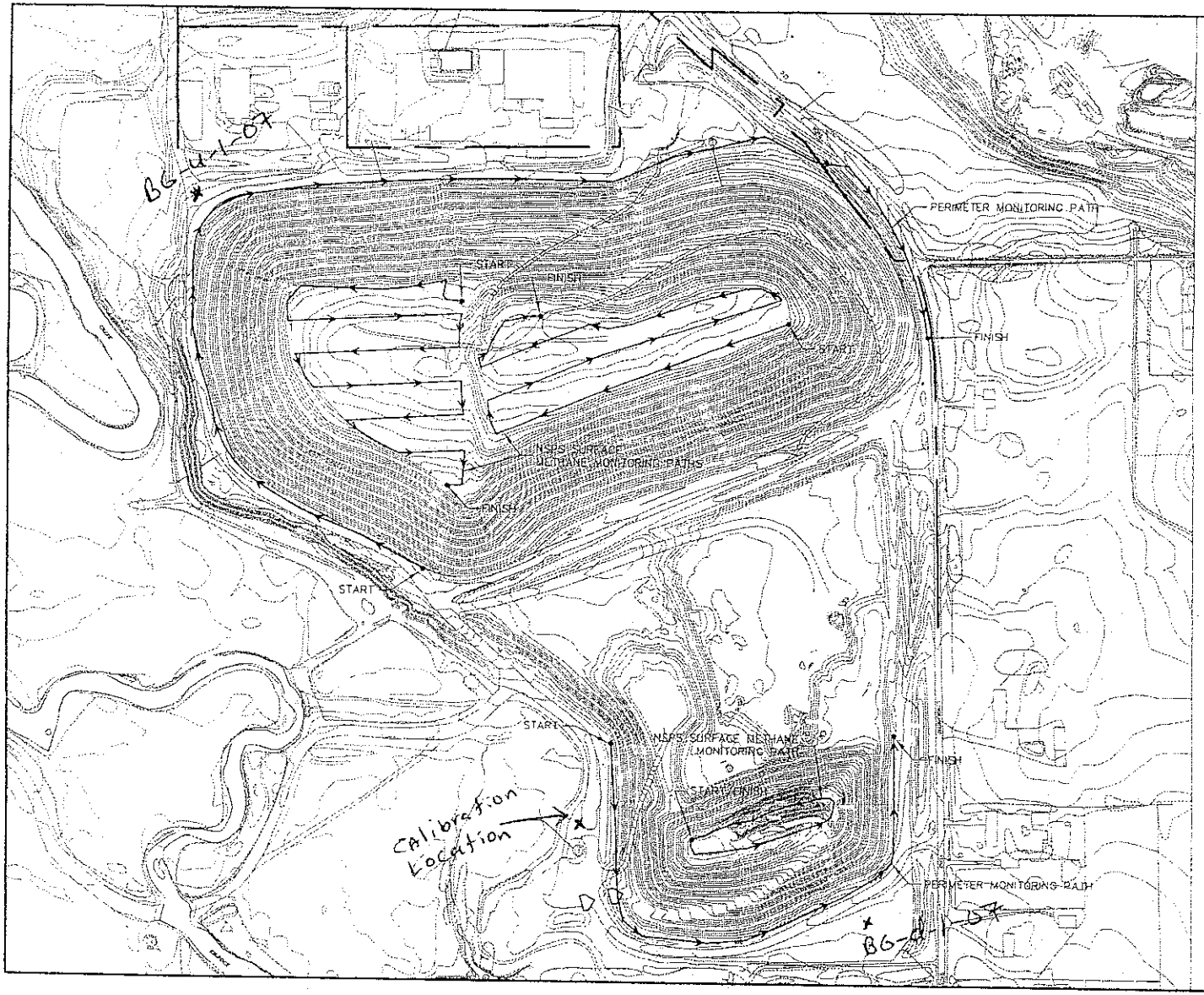
Background Concentrations

(remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)

Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-1-07	2:00	Upwind	2,002,350	799,600	1.8	
BG-D-1-07	2:15	Downwind	2,000,130	801,600	2.5	

Monitoring Data

Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
No exceedances						



NOTES:

1. START/FINISH POINTS AND DIRECTION OF MONITORING PATH MAY BE CHANGED ASSUMING EQUIVALENT COVERAGE IS MAINTAINED.

2. MONITORING PATH SUBJECT TO CHANGE BASED ON SITE OPERATIONS AT TIME OF MONITORING EVENTS.

3. AS ALLOWED BY 40 CFR 60.753(d), STEEP SLOPES (SUCH AS SIDE SLOPES) HAVE BEEN EXCLUDED FROM THE MONITORING PATH.

4. TOPOGRAPHIC MAPPING AND SITE FEATURES PROVIDED BY SITE PERSONNEL.

ANDREWS ENVIRONMENTAL ENGINEERING, INC.
7479 Shadeland Station Way, Indianapolis, Indiana 46256
(317)595-6492 Fax (317)596-6929
Pontiac, IL • Naperville, IL • Springfield, IL

APPROVED BY:	WGP	DESIGNED BY:	WGP	DRAWN BY:	TGH

1ST. QUARTER 2006 30-DAY RE-MONITORING PATH

PLANS PREPARED FOR
WASTE GROUP---WRS/PAGEL LANDFILL
ROCKFORD, WINNEBAGO COUNTY, ILLINOIS

DATE:	MAY 18, 2006
JOB NO.:	90-114SRF 0601
FILE NO.	90114027.DWG
SHEET:	1

ANDREWS ENVIRONMENTAL ENGINEERING

NSPS Surface Methane Monitoring
Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.

Date: 6/26/07 Site: Page 1 LF Project No.: 90-114512-F

Quarter (circle): 1st (2nd) 3rd 4th 2007 Technician: Savo Radulovic

Monitoring Event (circle): (initial) 1st 10-day re-monitor 2nd 10-day re-monitor

1-month re-monitor 1-month+10 day re-monitor

Instrument: Foxboro TVA-1000

Instrument Calibration:

Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.

Calibration gas: Methane @ 500 ppm

Date: 6/26/07 Time of calibration: 10:00 (am) pm

Calibration location (circle): office (field)

If calibrated in field, specify field location: 2,000,250N 800,700E

Instrument set to read 500 ppm methane? (Y) N If no, explain: _____

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

Temperature: 73 °F Wind direction/speed: SE / 3-14 mph Weather: cloudy, Light RAIN At times

Barometric Pressure—Beginning: 30.15 in. Hg @ 10:54 (am) pm

Ending: 30.14 in. Hg @ 1:46 am (pm)

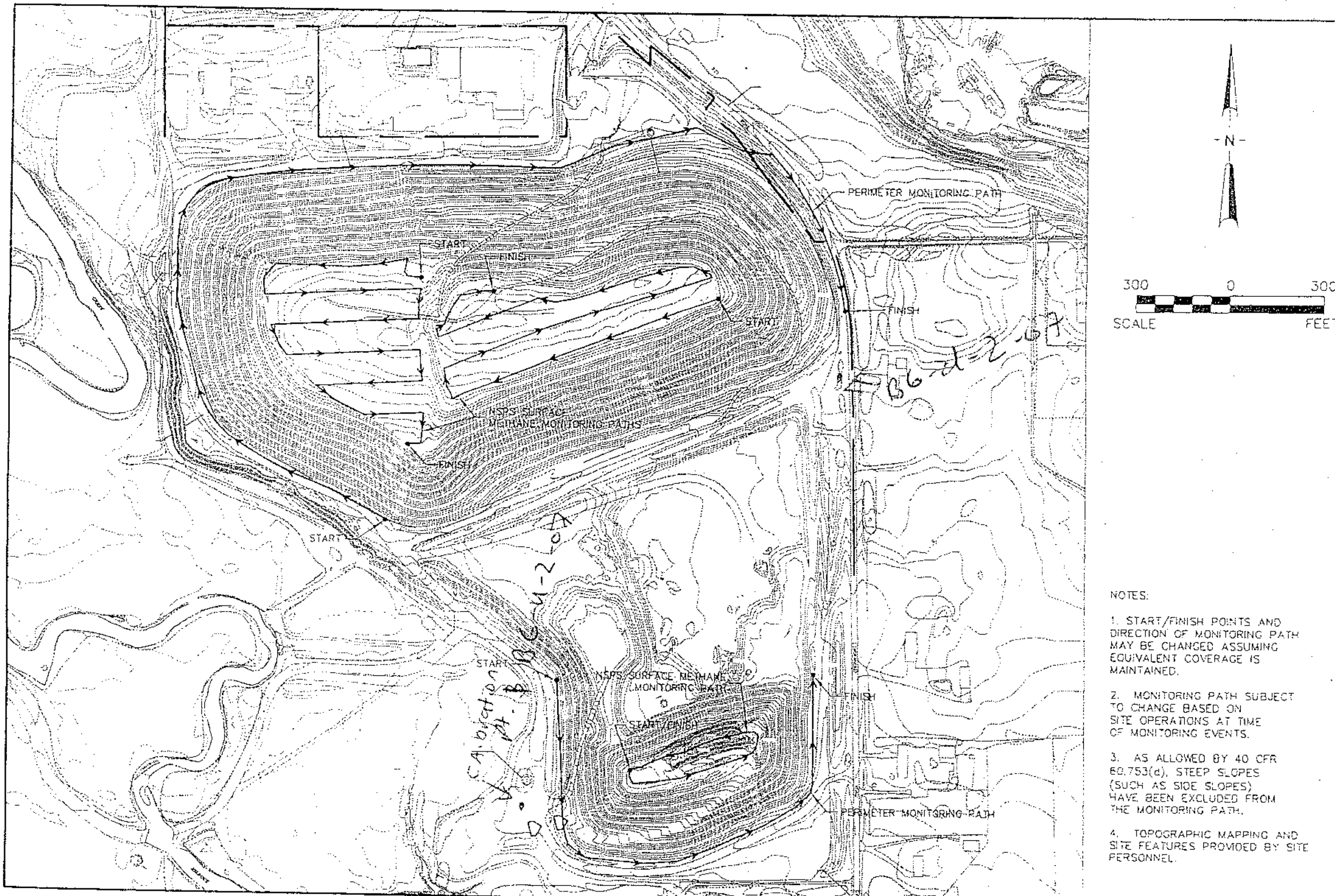
Background Concentrations

(remain at least 100' from perimeter LFG collection wells located inside the landfill footprint)

Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U-2-07	11:00	Upwind	2,000,250	800,700	3.4	
BG-D-2-07	11:15	Downwind	2,001,650	801,750	6.3	

Monitoring Data

Exceedance # (show on map)	Time	Location		>500 ppm detected?	Methane Conc. read	Notes/Comments
		Approx. N	Approx. E			
No exceedances						



NOTES:

1. START/FINISH POINTS AND DIRECTION OF MONITORING PATH MAY BE CHANGED ASSUMING EQUIVALENT COVERAGE IS MAINTAINED.

2. MONITORING PATH SUBJECT TO CHANGE BASED ON SITE OPERATIONS AT TIME OF MONITORING EVENTS.

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APPROVED BY: WGP | DESIGNED BY: WGP | DRAWN BY: TGH

1ST. QUARTER 2006 30-DAY RE-MONITORING PATH

PLANS PREPARED FOR
WASTE GROUP--WRS/PAGEL LANDFILL
ROCKFORD, WINNEBAGO COUNTY, ILLINOIS

DATE: MAY 18, 2006
JOB NO: 90-1145RF 060
FILE NO: 90114027.DWG
SHEET: 1